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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,984

10/28/2003

Takeshi Kimura

040302-0353

3973

22428

7590

03/08/2005

FOLEY AND LARDNER

SUITE 500

3000 K STREET NW

WASHINGTON, DC 20007

EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/693,984	Applicant(s) KIMURA ET AL.	
	Examiner Julie Lieu	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/28/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruko et al. (US Patent NO. 6,604,042) in view of Levine (US 2003/00141176).

Claims 1 and 18:

Reference to fig. 2, Maruko discloses an warning apparatus for a vehicle, comprising:

- a. a contact possibility warning unit or warning means 30 configured to determine a contact possibility of the vehicle contacting with an object that is present in front of the vehicle according to relative motion between the vehicle and the front object, the contact possibility warning unit providing a contact possibility warning 46 by changing at least one of the driving force and the braking of the vehicle according to the contact possibility
- b. a driver intention detector 44 configured to detect a driving intention of a driver of the vehicle, the driver intention detector detecting at least a driving intention of the driver that the driver is driving the vehicle in recognition that the possibility of the vehicle contacting the object is increasing
- c. a warning controller or controlling means 46 configured to provide and limit the contact possibility warning according to a detection result provided by the driver intention detector (see [0049]).

The reference fails to disclose changing the timing for providing the contact possibility warning. However, the reference does suggest limiting the warning depending on the detected driver's intention. See abstract. Further, the concept of limiting the warning by changing the time that the automatic control is known in the art as taught in Levine, wherein a timer 117 is used to change the amount of control based on the detected driver's intention. In light of this

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teaching and Maruko's suggestion, it would have been obvious to one skilled in the art to apply this concept in the Maruko to limit the overriding control as it is unnecessary.

Claim 2:

In Maruko, the driving intention is that the driver intentionally brings the vehicle closer to the front object when the vehicle is driven in a steady state.

Claim 3:

In Maruko, the driver intention detector detects a lane change of the vehicle as the intention of the driver in intentionally bringing the vehicle closer to the front object.

Claim 4:

The driver intention detector in the combined system of Levine and Maruko delays the timing of providing the contact possibility warning in a case where the front object is in a lane to which the vehicle is going to change its lane.

Claim 5:

In Levine, in the case the driver intention detector detects that the driver is intentionally bringing the vehicle closer to the front object with the vehicle in a steady driving state, the warning controller reduces a control value to change the driving torque or braking torque.

Claim 6:

In Levine's system, in a case where the driver intention detector detects that the driver is intentionally bringing the vehicle closer to the front object with the vehicle in a steady driving state, the warning controller reduces a control value to change the driving torque or braking torque.

Claim 7:

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The relative motion in Maruko is a relative speed between the vehicle and the front object (inherent, as it detects speeds of both subject and host vehicles, see col. 2 lines 24-43). In the case where the driver intention detector detects that the driver is intentionally bringing the vehicle closer to the front object with the vehicle in a steady driving state, the warning controller reduces a control value to change the driving torque or braking torque.

Claims 8-14:

The warning controller in the combined system of Maruko and Levine releases the change made by warning after a predetermined time. Para. [0049].

Claim 16:

In Maruko, the driving intention is determined as being that the driver intentionally brings the vehicle closer to the front object with the vehicle being driven under a steady state; and the warning controller reduces a control value to change the driving force or braking force by changing the first control condition.

Claims 15 and 17:

The system in Maruko detects proximity, i.e. the relative distance between the vehicles. Though it is not clearly disclosed that the contact possibility warning unit determines a contact possibility by comparing a time derived by dividing a relative distance between the vehicle and the front object by a speed of the vehicle with a threshold and provides a contact possibility warning under a first control condition according to the determined contact possibility, one skilled in the art would have readily recognized that the system in Maruko inherently performs equivalent functions to override the vehicle since it detects the relative distance and speed of the vehicle.

The warning controller delays the timing of providing the warning by changing the first threshold by changing the delay of timer 117.

Claim 19:

The rejection of claim 19 recites the rejection of claim 1, except it is a method claim.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on Mon-Fri 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julie Lieu
Primary Examiner
Art Unit 2636

Mar. 2, 05